MEMORANDUM

DATE: January 31, 2017

TO: Min Luo, P.E.
City of Redmond

FROM: Curtis Chin, P.E.
TENW

SUBJECT: Phase 1 Traffic Study
UPS Redmond Mezzanine – Redmond, WA
TENW Project No. 5403

This memorandum documents the Phase 1 traffic study completed for the proposed UPS Redmond Mezzanine project in Redmond, WA. The study includes a project description and trip generation estimate.

Project Description

The UPS Redmond Mezzanine project is located at 18001 NE Union Hill Road in the Southeast Redmond neighborhood of Redmond, WA. A vicinity map showing the location of the site and the surrounding area is included in Attachment A. The proposed project would include the addition of a 23,694 square foot mezzanine within the existing 249,697 sf UPS warehouse facility. The goal of this mezzanine project is to update the current small sort systems with more automated equipment that will increase delivery efficiency. No additional employees would be added to the site as a result of the project.

With the completion of the proposed mezzanine project, the total building area would be 273,391 sf (249,697 sf existing + 23,694 sf mezzanine). Access to the site would be provided by the existing site driveways on NE Union Hill Road. A preliminary site plan is shown in Attachment B.

Trip Generation

Trip generation estimates for the proposed UPS Redmond Mezzanine project were based on trip rates documented in the ITE *Trip Generation Manual*, 9th edition, for Warehousing (Land Use Code (LUC) 150). The net new trips associated with the proposed mezzanine project were determined by subtracting the existing use trips (249,697 sf warehouse) from the trips associated with the completed project (273,391 sf warehouse). The resulting net new weekday daily, AM and PM peak hour trips are summarized in Table 1. A detailed trip generation estimate is included in Attachment C.

Table 1
UPS Redmond Mezzanine
Trip Generation Summary

	Net New Trips Generated		
Time Period	In	Out	Total
Weekday Daily	44	44	88
Weekday AM Peak Hour	6	1	7
Weekday PM Peak Hour	1	5	6

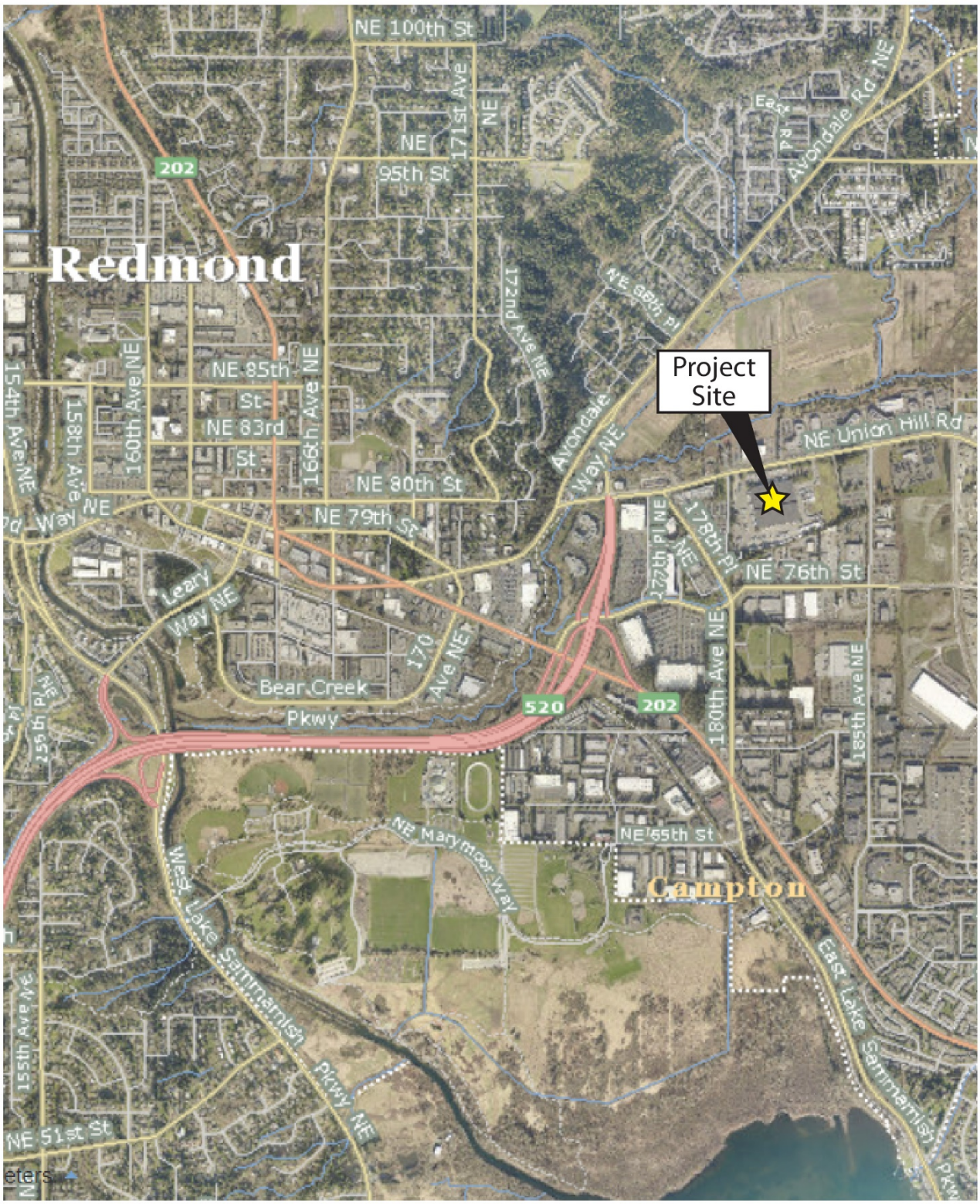
As shown in Table 1, the proposed UPS Redmond Mezzanine project is estimated to generate 88 net new weekday daily trips with 7 net new trips occurring during the weekday AM peak hour (6 in, 1 out), and 6 net new trips occurring during the weekday PM peak hour (1 in, 5 out).

Conclusion

Since the project is estimated to generate less than 30 weekday PM peak hour trips, it is anticipated that a Phase 2 traffic analysis would not be required for the proposed project. A concurrency application and Mobility Unit calculation will be submitted separately. If you have any questions regarding the information presented in this memo, please call me at (425) 250-5003 or email me at chin@tenw.com.

cc: Troy Bean, P.E., DCI-Engineers
Jeff Schramm, Planning Manager, TENW

Attachments



Attachment A: Site Vicinity Map

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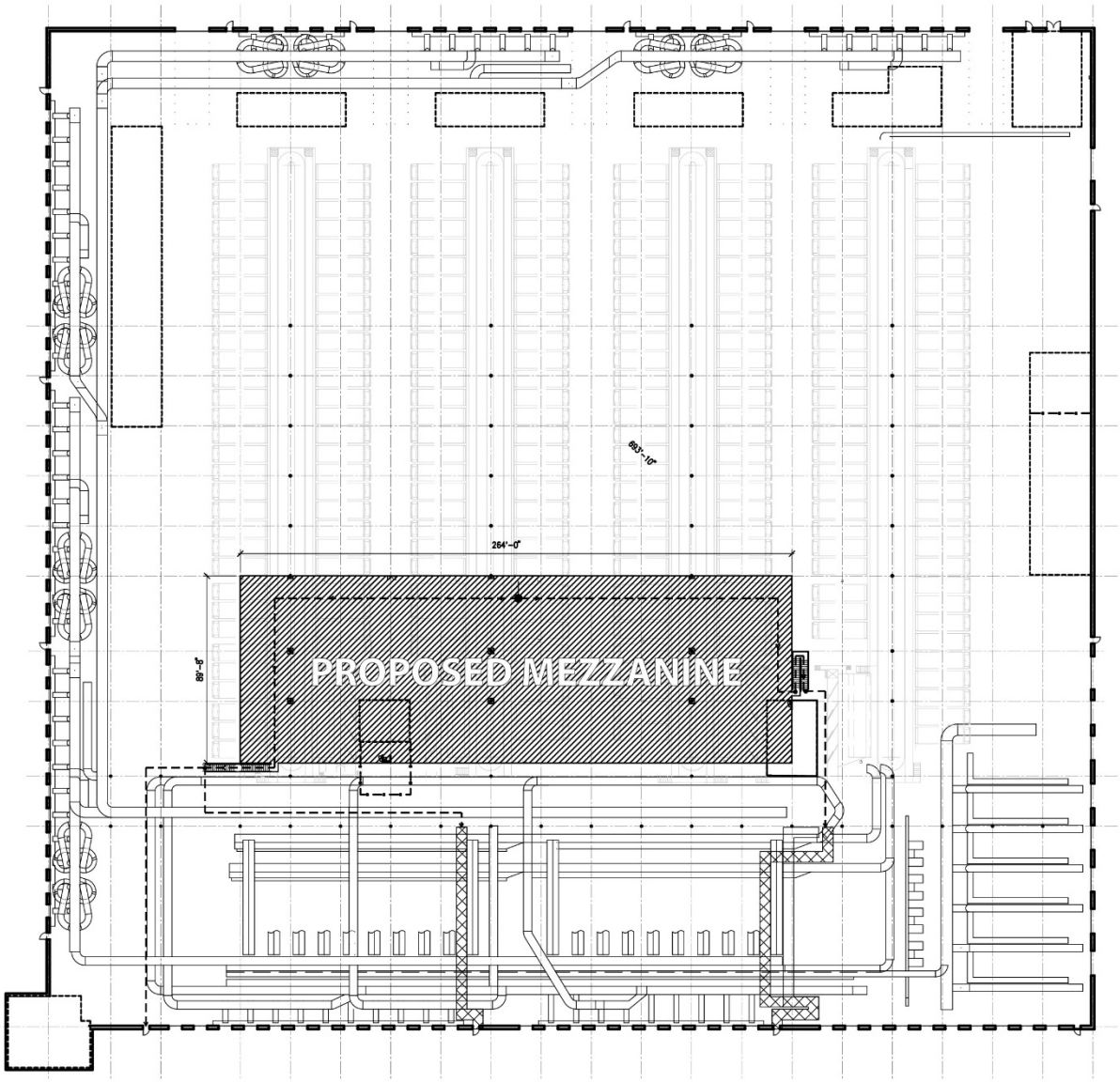
NOT TO SCALE



Attachment B: Preliminary Site Plan

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NOT TO SCALE

ATTACHMENT C

Trip Generation Calculations

					Directional Split[2]		TOTAL Trip Generation		
Land Use	**Size**	**Units [1]**	**ITE LUC [2]**	**Trip Rate [2]**	**Enter**	**Exit**	**Enter**	**Exit**	**Total**
DAILY									
With Proposed Mezzanine:									
Warehousing	273,391	GFA	150	equation	50%	50%	586	585	1,171
Less Existing Use:									
Warehousing	249,697	GFA	150	equation	50%	50%	-542	-541	-1,083
				NET NEW DAILY TRIP GENERATION:			**44**	**44**	**88**
AM PEAK HOUR									
With Proposed Mezzanine:									
Warehousing	273,391	GFA	150	equation	79%	21%	113	30	143
Less Existing Use:									
Warehousing	249,697	GFA	150	equation	79%	21%	-107	-29	-136
				NET NEW AM PEAK HOUR TRIP GENERATION:			**6**	**1**	**7**
PM PEAK HOUR									
With Proposed Mezzanine:									
Warehousing	273,391	GFA	150	equation	25%	75%	28	85	113
Less Existing Use:									
Warehousing	249,697	GFA	150	equation	25%	75%	-27	-80	-107
				NET NEW PM PEAK HOUR TRIP GENERATION:			**1**	**5**	**6**

[1] GFA = Gross Floor Area.

[2] Land Use Code, trip rates, and entering/exiting splits based on ITE *Trip Generation* Manual, 9th Edition, 2012.